

Meeting WISHA Training Requirements

- To meet the WISHA training requirements for benzene, you must include information specific to your worksite as indicated in slides # 7, 9, 13, 17, and 21
- Preview this program and include your specific workplace information before conducting the training.
- It is recommended you keep an attendance roster for your records to document training.

i

How To Use This PowerPoint Program

- Users with PowerPoint can download, edit, and use the program for training with a laptop and multimedia projector.
- Additional information is also found in the Notes section of this presentation below the slides. You can read the text in quotations found in the Notes section or use your own words.
- If you want to print out this program, the PDF file uses less computer memory and prints faster.

ii



Benzene

What this training will cover:

- Health hazards of benzene
- How you are exposed to benzene
- Control of your benzene exposure
- How to protect yourself from benzene
- Use of respirators
- Medical surveillance & medical removal
- WISHA rules on benzene

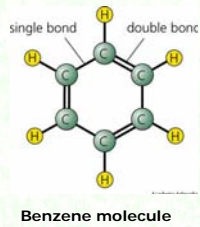
1

What is Benzene?

Benzene is clear liquid solvent made from petroleum.

It used to be used as an all-round solvent until it was found to cause cancer. It is now mostly used to make other chemicals.

It is highly flammable.



2

Where is Benzene Found?

In gasoline



Oil refineries



Other chemical plants



3

Hazards of Benzene

Exposure to benzene can cause:

Dizziness, headache, feeling "high"



Confusion, unconsciousness at high levels



Damage to the blood system

Leukemia if exposed for a long time



4

WISHA permissible limits for benzene

The WISHA 8-hour average permissible limit for benzene is one part per million in the air. → •

The WISHA short-term limit is 5 parts per million in the air. → ❖

5

Benzene Exposure

How can benzene get into you body?

The main way benzene would enter your body is by inhaling vapors.

Benzene is a liquid, but it easily evaporates into the air.

Some benzene can be absorbed through your skin.



6

Controls

We use the following controls to reduce the amount of benzene you are exposed to:

[List controls here]

7

Warning Signs

Warning signs are posted at the entrance to any area where the levels of benzene exceed the WISHA permissible limits.

All containers containing benzene also have a warning label.

Danger
Benzene
Cancer Hazard
Flammable-No Smoking
Authorized Personnel
Only
Respirator Required

Danger
Contains Benzene
Cancer Hazard

8

Worksite Exposure Control Areas

[List specific worksite exposure control areas where respirators must be worn here.]

9

How to Protect Yourself

Required Work Practices

Wear respirators assigned to you,



Wear gloves and goggles if working with liquid benzene or liquid solvents containing benzene,



Wash your hands before eating, drinking or smoking or using the bathroom.



10

How to Protect Yourself

To prevent inhaling benzene, make sure your respirator fits properly before entering an area where benzene vapors exist.

If you think your respirator is leaking, leave the area immediately and have it re-fitted, repaired or replaced.

If you know or believe you have inhaled benzene, let your supervisor know immediately.



11

How to Protect Yourself

In the case of large spill or release of benzene:

Leave the area immediately,

Do not attempt to clean up the spill,

Notify your supervisor.



12

Required work practices at this worksite

[List worksite-specific work practices that reduce or control exposures here.]

13

Respirators

Type of Respirators for Benzene

In some jobs involving benzene, you may need a respirator.

The type of respirator worn depends on the amount of benzene in the air.

We will give you the proper type of respirator.



14

Respirators

Using Respirators

Respirators must be worn at all times when the amount of benzene in the air is above the permissible limit.

Respirators must fit properly to prevent leaks.

You must have a medical evaluation before you wear a respirator.



15

Respirators

Respirators Must Fit Properly

You must have a respirator fit-test before you wear a respirator.

You can't have a beard or other facial hair when wearing a tight-fitting respirator.

We will train you on how to use your respirator.



16

Respirators You Must Use

[List or describe what respirators must be used under what conditions, job tasks or locations here]

17

Medical Monitoring

What medical monitoring is needed?

A medical exam is made available to you if you are exposed to benzene above 0.5 ppm 30 days or more per year, or above 1 ppm more than 10 days per year.

The medical exam includes a complete physical exam and blood tests.

The medical exam is made available to you before you start working around benzene and yearly after that.

[Link to contents of medical evaluation](#)

18



Temporary Medical Removal

If abnormalities show up in the blood tests, the doctor may ask for additional tests and temporary removal from your current job.

In that case, we will find other work for you in an area where you are not exposed to benzene.

You do not lose any earnings, seniority or benefits during the removal time.

19



Permanent Medical Removal



Permanent medical removal may be required because of the potential serious health effects of benzene.

Depending on your medical condition, you may not be able to return to your original position.

If the doctor recommends permanent job removal, we will seek a job transfer for you.

20

Worksite Medical Surveillance Program

Describe details of worksite specific medical surveillance program here.

21

Air Monitoring

We do regular air monitoring of benzene in the air. Air monitoring is done in the "breathing zone" by attaching air sampling devices to employees exposed to benzene.



Results of air monitoring are as follows:

22

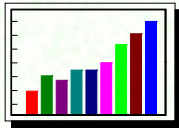
Records

Medical and Air Monitoring Records

You have the right to see any of your medical records related to benzene.



You also have the right to see results of any air sampling for benzene we have done.



23

Benzene Regulations

WISHA Benzene Regulations

The WISHA benzene regulations contains much more information in detail.

A copy of this standard is available.



Link to handouts: [Appendix A](#), [Appendix B](#)

24
